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32nd Annual Edition

Newspaper and Newsprint Facts at a Glance 1989-90

Newsprint Information Committee
420 Lexington Avenue
New York, N.Y. 10017

Canadian Pacific Forest Products

Fletcher Challenge Canada

Kruger

Maclaren

MacMillan Bloedel

To The Reader:

The Canadian newsprint producers who make up the Newsprint Information Committee are pleased to bring you this, the thirty-second annual edition of Newspaper and Newsprint Facts at a Glance.

We hope you will find this compendium of information about the newspaper and newsprint industries useful.

If you have any suggestions concerning material in this booklet, we would welcome them.

A list of the Canadian newsprint producers constituting the Newsprint Information Committee appears on the following page.

THE NEWSPRINT INFORMATION COMMITTEE

Members of the Newsprint Information Committee and their service representatives in the United States:

Canadian Pacific Forest Products Ltd.
Canadian Pacific Forest Products Inc.

Fletcher Challenge Canada Ltd.
Fletcher Challenge Paper Company

Kruger Inc.
Kruger Pulp and Paper Sales, Inc.

James Maclaren Industries Inc.

MacMillan Bloedel Limited
Powell River-Alberni Sales Corp.

NEWSPRINT INFORMATION COMMITTEE
420 Lexington Avenue,
New York, NY 10017
(212)697-5600

1990 NEWSPRINT CAPACITY BY PRODUCERS

Canadian Mills	1990 Capacity* in Metric Tons	
Abitibi-Price Inc. (Group Total)		1,514,000
Alma, Que	128,000	
Beaupre, Que	12,000	
Chandler, Que	208,000	
Fort William, Ont	141,000	
Grand Falls, Nfld	196,000	
Iroquois Falls, Ont	263,000	
Kenogami, Que	65,000	
Pine Falls, Man	173,000	
Stephenville, Nfld	166,000	
Thunder Bay, Ont	164,000	
Alberta Newsprint, Whitecourt, Alta		40,000
Atlantic Packaging, Whitby, Ont		20,000
Boise Cascade Canada Ltd		
Kenora, Ont		262,000
Bowater Mersey Paper Ltd.		
Liverpool, N.S.		216,000
Canadian Pacific Forest Products		
Limited (Group Total)		1,647,000
Dalhousie, N.B.	302,000	
Gatineau, Que	525,000	
Gold River, B.C.	167,000	
Thunder Bay, Ont	400,000	
Trois-Rivieres, Que	253,000	
Stone-Consolidated Inc. (Group Total)		816,000
Grand' Mere, Que	46,000	
Port Alfred, Que	371,000	
Shawinigan Falls, Que	288,000	
Trois-Rivieres, Que	111,000	
Daishowa Forest Products Ltd., Quebec, Que		430,000
Domtar Inc. (Group Total)		252,000
Dolbeau, Que	145,000	
Donnacona, Que	40,000	
Red Rock, Ont	67,000	

* Preliminary

Total columns may not add up due to rounding of individual mill capacities.

Canadian Mills (cont.)	1990 Capacity* in Metric Tons	
Donohue Inc. (Group Total)		488,000
Amos, Que.	172,000	
Clermont, Que.	316,000	
Fletcher Challenge Canada Limited (Group Total)		1,124,000
Crofton, B.C.	474,000	
Elk Falls, B.C.	473,000	
Mackenzie, B.C.	177,000	
Kruger Inc. (Group Total)		754,000
Bromptonville, Que.	205,000	
Corner Brook, Nfld.	376,000	
Trois-Rivieres, Que.	173,000	
James Maclaren Industries Inc. Buckingham, Que.		187,000
MacMillan Bloedel Ltd. (Group Total)		574,000
Port Alberni, B.C.	154,000	
Powell River, B.C.	420,000	
Quebec and Ontario Paper Company Ltd. (Group Total)		764,000
Baie Comeau, Que.	458,000	
Thorold, Ont.	306,000	
Rothesay Paper Ltd. Saint John, N.B.		322,000
F.F. Soucy Inc., Riviere-du-Loup, Que.		167,000
Spruce Falls Power & Paper Co. Ltd. Kapuskasing, Ont.		322,000
Stora Forest Industries Point Tupper, N.S.		171,000
TOTAL CANADIAN CAPACITY		10,070,000

*Preliminary
Source: Canadian Pulp & Paper Assn.

United States Mills	1990 Capacity* in Metric Tons	
Alabama River Newsprint Co., Claiborne, Al.		64,000
Augusta Newsprint Co., Augusta, GA.		349,000
Bear Island Paper Co., Ashland, VA.		203,000
Boise Cascade Corp. (Group Total)		539,000
DeRidder, LA.	352,000	
Steilacoom, WA.	187,000	

United States Mills (cont.)	1990 Capacity* in Metric Tons	
Bowater Inc. (Group Total)		934,000
Calhoun, TN	714,000	
Catawba, SC	220,000	
Champion International (Group Total)		784,000
Lufkin, TX	355,000	
Sheldon, TX	429,000	
FSC Paper Co., L.P., Alsip, IL		122,000
Garden State Paper Co., Inc., Garfield, NJ		201,000
Golden State Newsprint Co., Inc., Pomona, CA		122,000
Great Northern Paper Co.		
E. Millinocket, ME		318,000
Inland Empire Paper Co., Millwood, WA		72,000
James River Corp., Wauna, OR		22,000
Kimberly-Clark Corp., Coosa River Newsprint Div.		
Coosa Pines, AL		381,000
Manistique Papers, Inc.		
Manistique, MI		56,000
Newsprint South, Inc., Grenada, MS		194,000
North Pacific Paper Co., Longview, WA		476,000
Ponderay Newsprint Co., Usk, WA		185,000
Smurfit Newsprint Corp. (Group Total)		577,000
Newberg, OR	357,000	
Oregon City, OR	220,000	
Southeast Paper Manufacturing Co., Dublin, GA		378,000
Stone Container Corp.		
Snowflake, AZ		275,000
TOTAL U.S. CAPACITY		6,252,000

*Preliminary
Source: American Paper Institute and
American Newspaper Publishers Assn.

NORTH AMERICAN NEWSPRINT
CAPACITY, PRODUCTION, CONSUMPTION, SOURCES OF SUPPLY

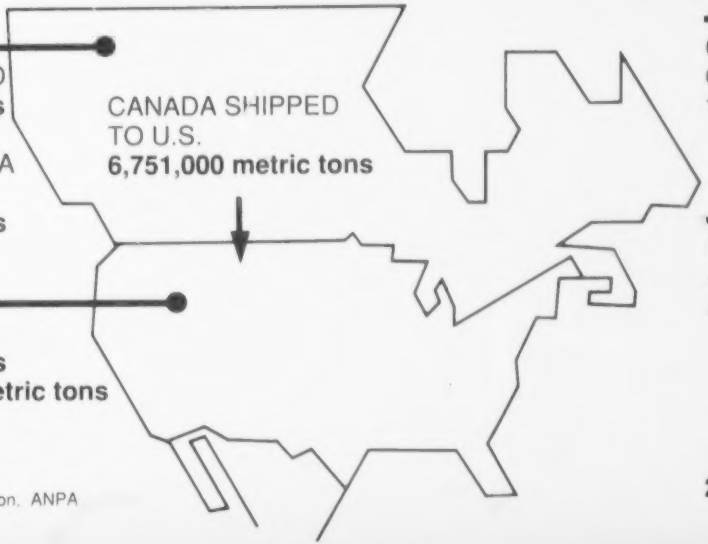
Sources: ANPA, Canadian Pulp & Paper Assn., API

	1990[1,3] Metric Tons	1989[3] Metric Tons	1980[3] Metric Tons	1970[4] Metric Tons
CAPACITY				
U.S. Mills	6,176,000	5,697,000	4,420,000	3,205,000
Canadian Mills	10,070,000	10,020,000	9,130,000	8,743,000
	16,246,000	15,717,000	13,550,00	11,948,000
PRODUCTION				
U.S. Mills	NOT AVAILABLE	5,523,044	4,238,000	3,142,000
Canadian Mills		9,640,000	8,625,000	7,910,000
		15,163,044	12,863,000	11,052,000
U.S. CONSUMPTION				
By all Users		12,241,000	10,088,000	8,805,000
By Daily & Sunday Newspapers		9,076,642[2]	7,789,266	7,345,746
% of total consumption		74.1%[2]	77.2%	83.4%
U.S. SOURCES OF SUPPLY				
From Canada		56.3%	59%	63%
From U.S.		42.0%	39%	34%
From Overseas		1.7%	1%	3%

1. Preliminary. 2. See footnote, page 17. 3. Calculations are based on 30 lb newsprint basis weight. 4. Calculations are based on 32 lb newsprint basis weight.

To convert metric tons to short tons, multiply by 1.1023.

FLOW OF NORTH AMERICAN NEWSPRINT, 1989



CANADA PRODUCED
9,640,000 metric tons

SHIPPED BY CANADA
TO CANADA
1,141,000 metric tons

U.S. PRODUCED
5,523,044 metric tons
USED **12,241,000 metric tons**

CANADA SHIPPED
TO U.S.
6,751,000 metric tons

CANADA SHIPPED
OVERSEAS
1,714,000 metric tons

U.S. SHIPPED
OVERSEAS
485,231 metric tons

U.S. IMPORTED
FROM OVERSEAS
201,153 metric tons

Source:
Canadian Pulp & Paper Association, ANPA

CANADA LEADS WORLD IN NEWSPRINT PRODUCTION

Source: CPPA

1989
Production, 000's*

Nation	Metric Tons	Percent of Total
Canada	9,640	30.2
United States	5,523	17.3
Japan	3,217	10.1
Sweden	2,173	6.8
U.S.S.R.	1,800	5.6
Finland	1,182	3.7
West Germany	992	3.1
Norway	874	2.7
Britain	572	1.8
Australia	417	1.3

Total World Production (1989 Est.)—31,921,000 metric tons
(Total includes People's Republic of China.)

*Preliminary

U.S. IS WORLD'S LEADER IN NEWSPRINT DEMAND

Source: CPPA

1989
Demand, 000's*

Nation	Metric Tons	Percent of Total
United States	11,982	38.0
Japan	3,554	11.3
Britain	1,920	6.1
West Germany	1,596	5.1
U.S.S.R.	1,451	4.6
Canada	1,141	3.6
France	727	2.3
Australia	730	2.3
Italy	543	1.7
India	480	1.5
Netherlands	470	1.5

Total World Demand (1989 Est.)—31,521,000 metric tons
(Total includes People's Republic of China.)

*Preliminary

WORLD NEWSPRINT CAPACITY (thousands of metric tons)

	1988	1989	1990p
Canada	9,945	10,020	10,070
U.S.A.	5,550	5,695	6,175
Finland	1,380	1,370	1,445
Norway	915	950	910
Sweden	2,375	2,580	2,585
European Community			
Britain	520	620	770
Belgium & Luxembourg	115	120	115
France	360	370	405
Germany, West	955	1,000	1,080
Greece	15	15	15
Italy	260	255	275
Netherlands	310	340	365
Spain	165	170	170
Austria	280	285	345
Switzerland	270	280	285
Turkey	195	195	195
Mexico	420	420	420
Argentina	240	240	240
Brazil	260	260	260
Chile	195	195	195
Nigeria	100	100	100
Kenya	10	10	10
Madagascar	1	1	1
Zimbabwe	20	20	20
South Africa Republic	440	440	440
Tanzania	10	10	10
Bangladesh	50	50	50
India	360	360	390
Indonesia	180	180	180
China (estimates)	540	540	540
Republic of Korea	380	440	490
Philippines	115	140	165
Taiwan	120	100	90
Japan	3,260	3,410	3,625
Australia	440	440	440
New Zealand	340	340	340
Sub-total	**31,091**	**31,961**	**33,211**
Bulgaria	15	15	15
Czechoslovakia	85	105	105
Germany, East	165	165	165
Poland	100	100	100
Romania	120	120	120
U.S.S.R.	2,110	2,110	2,110
Yugoslavia	155	155	155
Eastern Europe (estimates)	2,750	2,770	2,770
World Total	**33,841**	**34,731**	**35,981**

p = preliminary
Source: Canadian Pulp & Paper Assn

WORLD NEWSPRINT SUMMARY (thousands of metric tons)

		1988	1989	1990p
Canada	Capacity	9,945	10,020	10,070
	Production	9,840	9,640	
	Exports	8,542	8,466	
	Demand	1,198	1,141	
United States	Capacity	5,550	5,695	6,175
	Production	5,427	5,523	
	Imports	7,264	6,952	
	Exports	381	485	
	Demand	12,297	11,982	
Scandinavia	Capacity	4,670	4,900	4,940
	Production	4,159	4,229	
	Exports	3,396	3,426	
	Demand	761	775	
European Community (Twelve)*	Capacity	2,700	2,890	3,195
	Production	2,712	2,771	
	Imports	4,016	4,354	
	Exports	683	683	
	Demand	5,850	6,241	
Other W. Europe*	Capacity	745	760	825
	Production	633	647	
	Imports	125	145	
	Exports	224	223	
	Demand	524	555	
Latin America*	Capacity	1,115	1,115	1,115
	Production	1,028	1,023	
	Imports	720	649	
	Exports	200	219	
	Demand	1,540	1,434	
Africa*	Capacity	581	581	581
	Production	436	439	
	Imports	112	137	
	Exports	202	220	
	Demand	348	356	
Asia*	Capacity	5,005	5,220	5,530
	Production	4,440	4,624	
	Imports	1,466	1,517	
	Exports	128	86	
	Demand	5,777	6,055	
Oceania*	Capacity	780	780	780
	Production	732	715	
	Imports	296	327	
	Exports	161	180	
	Demand	862	856	
Eastern Europe*	Capacity	2,750	2,770	2,770
	Production	2,284	2,310	
	Imports	247	243	
	Exports	415	427	
	Demand	2,116	2,126	
World Total	Capacity	33,841	34,731	35,981
	Production	31,691	31,921	
	Imports	14,246	14,323	
	Exports	14,331	14,415	
	Demand	31,274	31,521	

*Exports and imports include internal trade within these regions.

p=preliminary
Source: Canadian Pulp & Paper Assn.

THE PRICE OF NEWSPRINT — 1939-1989*

Short Tons		Short Tons	
1939	$ 50.00	1966	$ 136.92
1940	50.00	1967	140.50
1941	50.00	1968	142.00
1942	50.00	1969	147.00
1943	54.66	1970	152.00
1944	58.00	1971	157.33
1945	60.25	1972	164.58
1946	72.25	1973	175.00
1947	88.50	1974	210.00
1948	97.67	1975	260.00
1949	100.00	1976	282.50
1950	101.00	1977	302.50
1951	111.00	1978	320.00
1952	121.00		
1953	126.00	**Metric Tons**	
1954	126.00	1979	$ 386.11
1955	126.00	1980	436.50
1956	130.00	1981	482.50
1957	133.00	1982	495.00
1958	134.00	1983	484.25
1959	134.00	1984	515.40
1960	134.00	1985	535.00
1961	134.00	1986	543.75
1962	134.00	1987	590.00
1963	134.00	1988	650.00
1964	134.00	1989	650.00
1965	134.00		

*Annual average contract price per ton delivered at New York City. Prices through 1973 are for 32-lb. paper; thereafter for 30-lb. One metric ton equals 1.1023 short tons.

NEWSPRINT AS AN ELEMENT OF TOTAL PUBLISHING COST

Typical dailies	1988	1989
Daily of 1,000,000 + circulation	25.7%	23.9%
Daily of 250,000 circulation	26.3%	26.7%
Daily of 50,000 circulation	21.8%	21.6%
Daily of 9,000 circulation	13.9%	13.1%

(85% of all dailies have less than 50,000 circulation)

U.S. NEWSPRINT CONSUMPTION 1959 - 1989

Year	Short Tons (Thousands)	Year	Short Tons (Thousands)
1959	6,704	1976	9,577
1960	6,962	1977	10,228
1961	6,919	1978	10,878
1962	7,018		
1963	7,075		Metric Tons
1964	7,539	Year	(Thousands)
1965	8,016	1979	10,199
1966	8,580	1980	10,088
1967	8,660	1981	10,164
1968	8,744	1982	10,108
1969	9,239	1983	10,589
1970	9,117	1984	11,431
1971	9,248	1985	11,587
1972	9,938	1986	11,937
1973	10,195	1987	12,323
1974	10,102	1988	12,337
1975	9,172	1989	12,241

Source: ANPA, CPPA

Note: Tonnage for years prior to 1974 has been recalculated to a 30-pound basis for comparative purposes

To convert short tons to metric tons, divide short tons by 1.1023

NEWSPRINT MISCELLANY

Basis Weight/Grammage

The weight in pounds of a ream (500 sheets) of newsprint 24 by 36 inches (equal to 3,000 square feet) is its basis weight. Virtually all U.S. and Canadian newsprint capacity is on a nominal 30-lb. basis weight standard. In metric terms, this is expressed as grammage, or the weight in grams of one sheet of newsprint measuring one square meter. Thus a 30-lb. basis weight is equivalent to a grammage of 48.8 (more frequently expressed as 48.8 g/m^2).

Basis weight/grammage conversion tables appear on page 30.

Newsprint Storage

ANPA/RI recommends storing newsprint at a temperature of 60° to 70° F. Newsprint that has been in transit under frigid conditions should be kept in a warm storage room several weeks before it is used on press.

Unwound newsprint gives up or takes on moisture in seconds; therefore, says ANPA/RI, most experts recommend that the pressroom environment be maintained at 45 percent relative humidity. Many newspapers have humidity control devices in their pressroom air handling systems or supplemental humidity units operating in the pressroom areas. Proper humidity conditions definitely aid runnability.

Newsprint and Environment

Wood for newsprint is a renewable natural resource. In Canada, it comes from nearly a million square miles of productive forest, 90 percent owned by the public. Wood is harvested in accordance with rules laid down by the provincial governments.

The forests are managed so as to give perpetual yield. The annual cut is less than annual growth. Thus the current wood supply can be maintained in perpetuity. Mature trees left unharvested fall prey to fire, insects, disease, and decay.

Canadian mills are involved in a costly long-term anti-pollution program. Meanwhile, both government and industry researchers continue to seek improved methods of waste disposal.

Over five million short tons of old newspapers are recovered annually in the U.S. for recycling in the U.S. and overseas, according to the American Paper Institute. They go into such products as paperboard, wallboard, insulation and molded pulp products and more than 1.5 million tons of recycled newsprint.

DATA ON U.S. NEWSPAPERS

	1989	1988	1979
U.S. Daily Newspaper Circulation[1]			
Morning Newspapers[2]	40,759,016	40,452,815	28,574,879
Evening Newspapers[2]	21,890,202	22,242,001	33,648,161
Total Dailies	62,649,218[3]	62,694,816	62,223,040
U.S. Sunday Newspapers	62,008,154[1,4]	61,474,189	54,379,923
U.S. Weekly Newspapers	52,919,846[5]	51,691,451	42,347,512
Average Pages Printed[6,7]			
U.S. Dailies			
A.M. Papers	101	100	70
P.M. Papers	80	84	59
Sunday Papers	362	365	207
Advertising Expenditures			
U.S. Daily and Sunday Newspapers[6]	$32,368,000,000	$31,197,000,000	$13,863,000,000

1. Editor & Publisher. 2. 1989 figures for 530 morning and 1,125 evening dailies. 3. 1,626 total dailies; 29 "all-day" newspapers are counted in a.m. and p.m. figures, but only once in the total. 4. 847 Sunday newspapers. 5. ANPA: 7,606 weekly newspapers, includes paid and free circulation newspapers. 6. Newspaper Advertising Bureau. 7. Leading National Advertisers; includes preprints on a linage basis.

LARGEST U.S. DAILIES

1989

Circulation[1]		Newsprint Usage[2] (Metric Tons)
1,935,866	The Wall Street Journal (m)[3]	153,057
1,387,233	USA Today (m)[3]	150,000
1,210,077	Los Angeles Times (m)	438,384
1,180,139	New York Daily News (m)	154,143
1,149,683	The New York Times (m)	322,000
824,282	The Washington Post (m)	250,000
740,713	Chicago Tribune (m)	215,925
711,264	Newsday (all day)	149,837
639,767	Detroit Free Press (m)	89,617
569,257	San Franscisco Chronicle (m)	109,450

1. ABC FAS-FAX figures as of March 31, 1990. Source: Audit Bureau of Circulations.
2. Independent verification.
3. National edition.

LARGEST U.S. NEWSPAPER COMPANIES (Ranked by Daily Circulation)

Company	Daily Papers	Daily Circulation[1]	Sunday Papers	Sunday Circulation[1]
Gannett Co.	82	5,943,933	64	6,154,655
Knight-Ridder Newspapers	28	3,917,436	24	5,334,381
Newhouse Newspapers	26	3,041,871	21	3,838,200
Times Mirror	8	2,734,156	7	3,265,114
Tribune Co.	9	2,669,658	7	3,550,155
Dow Jones	24	2,501,306	14	490,165
Thomson Newspapers	124	2,146,158	69	1,698,811
New York Times Co.	27	2,071,552	17	2,567,295
Scripps-Howard Newspapers	21	1,620,519	11	1,801,826
Cox Enterprises	18	1,368,496	17	1,738,756

1. Average for six months ended March 31, 1990.
Source: Morton Research, Lynch, Jones & Ryan.

NEWSPAPER NEWSPRINT CONSUMPTION BY STATES*
(Metric Tons)

	1989	1988	Percent Increase/ Decrease
New England States			
Connecticut	111,473	116,945	– 4.7
Maine	26,623	27,934	– 4.7
Massachusetts	307,969	324,994	– 5.2
New Hampshire	22,185	23,409	– 5.2
Rhode Island	42,784	44,155	– 3.1
Vermont	9,291	9,369	– 0.8
Total	520,325	546,806	– 4.8
Middle Atlantic States			
New Jersey	357,868	391,788	– 8.7
New York	880,766	934,795	– 5.8
Pennsylvania	419,962	423,572	– 0.9
Total	1,658,596	1,750,155	– 5.23
South Atlantic States			
Delaware	18,685	17,322	+ 7.9
District of Columbia	266,360	260,082	+ 2.4
Florida	631,263	613,696	+ 2.9
Georgia	213,731	209,790	+ 1.9
Maryland	129,580	124,154	+ 4.4
North Carolina	167,303	171,469	– 2.4
South Carolina	78,307	72,606	+ 7.9
Virginia	146,881	146,644	+ 0.2
West Virginia	31,578	31,381	+ 0.6
Total	1,683,688	1,647,144	+ 2.2
East North Central States			
Illinois	448,539	451,592	– 0.7
Indiana	151,346	149,188	+ 1.4
Michigan	329,981	322,040	+ 2.5
Ohio	338,815	338,555	+ 0.1
Wisconsin	129,990	130,485	– 0.4
Total	1,398,671	1,391,860	+ 0.5
East South Central States			
Alabama	76,468	74,994	+ 2.0
Kentucky	69,779	70,253	– 0.7
Mississippi	35,201	35,092	+ 0.3
Tennessee	120,398	121,824	– 1.2
Total	301,846	302,163	– 0.1

	1989	1988	Percent Increase/ Decrease
West North Central States			
Iowa	73,226	72,435	+ 1.1
Kansas	41,550	41,464	+ 0.2
Minnesota	134,952	135,277	– 0.2
Missouri	174,166	173,852	+ 0.2
Nebraska	47,455	46,152	+ 2.8
North Dakota	13,212	12,412	+ 6.4
South Dakota	11,222	10,843	+ 3.5
Total	495,783	492,435	+ 0.7
West South Central States			
Arkansas	64,036	63,744	+ 0.5
Louisiana	105,909	109,475	– 3.3
Oklahoma	71,765	71,646	+ 0.2
Texas	666,048	637,495	+ 4.5
Total	907,758	882,360	+ 2.9
Mountain States			
Arizona	138,981	138,847	+ 0.1
Colorado	176,673	180,904	– 2.3
Idaho	15,480	15,371	+ 0.7
Montana	12,907	12,418	+ 3.9
Nevada	48,318	46,663	+ 3.5
New Mexico	27,984	26,764	+ 4.6
Utah	36,624	33,734	+ 8.6
Wyoming	5,533	5,962	– 7.2
Total	462,500	460,663	+ 0.4
Pacific States			
Alaska	17,649	16,792	+ 5.1
California	1,357,174	1,297,883	+ 4.6
Hawaii	29,867	28,812	+ 3.7
Oregon	98,111	94,170	+ 4.2
Washington	144,674	139,229	+ 3.9
Total	1,647,475	1,576,886	+ 4.5
Total U.S.	9,076,642	9,050,472	+ 0.3

Source: ANPA

*This ANPA compilation reflects 1989 newsprint consumption by 1,719 dailies as well as some foreign language, college and special service publications such as trade newspapers. The 9,076,642 metric ton total represents 74.1 percent of the estimated total U.S. consumption of 12,241,000 metric tons by all users.

To convert metric tons to short tons, multiply by 1.1023.

WORLD'S LARGEST DAILY NEWSPAPERS
(Ranked by 1989 Circulation)

Izvestia (Russia)	10.8 million
Yomiuri Shimbun (Japan)	9.7 million
Asahi Shimbun (Japan)	8.1 million
Pravda (Russia)	8.0 million
Bild (West Germany)	5.9 million
Renmin Ribao (People's Republic of China)	5.0 million
Mainichi Shimbun (Japan)	4.1 million
The Sun (England)	4.0 million
Daily Mirror (England)	3.1 million
Chunichi Shimbun (Japan)	2.9 million

Source: ABC London; Japan Audit Bureau of Circulations; International Federation of Audit Bureaus of Circulations; Editor & Publisher. Independent verification.

HOW U.S. MEDIA SHARED ADVERTISING EXPENDITURES

SOURCE: McCann-Erickson, Inc.
($000,000)

	1989	1988	1979
Newspapers	$32,368	$31,197	$13,863
Magazines	6,716	6,072	2,932
Television	26,891	25,686	10,154
Radio	8,323	7,798	3,310
Others	49,602	47,297	18,521
TOTAL	$123,900	$118,050	$48,780

All production costs included.

RESEARCH FOR NEWSPAPERS

For nearly thirty years, the Canadian newsprint producers of the Newsprint Information Committee have financed research projects in behalf of their customers, the newspapers. By defining the newspaper medium's strengths, the research findings have helped sell tens of millions of dollars worth of newspaper advertising, reports the Newspaper Advertising Bureau.

Some of the research has developed information to help newspapers increase circulation and readership, in addition to advertising. This was the intent of the project completed in mid-1989, which explored the Teenage Newspaper Audience.

Since 1960, NIC has contributed $850,000 to finance 12 newspaper advertising and readership research projects. Highlights of the last two projects are presented below.

"Today's Teenagers: Tomorrow's Readers"*

Over the past two decades, the level of newspaper reading has slipped with each succeeding generation of young adults. In 1967, 71% of 18-24 years olds reported reading a newspaper on the previous day. By 1988, that figure had fallen to 55%.

The purpose of the study of teenagers was to:

- Examine the comparative attractions of newspapers, other print media, and broadcast programming for teenagers of different social backgrounds;
- Provide editors and circulation executives with ideas that may help build teenage readership.

A national cross-section of 2,089 teenagers was personally interviewed by Simmons Market Research Bureau in spring 1988, and 1,075 of them were queried again in December with a series of followup questions prepared by NAB.

The research showed that 41% of teenagers read the newspaper on an average day, while 16% read the newspaper five out of five weekdays. Sunday, with an average readership of 48%, attracts more teenagers than an average weekday paper.

A positive factor in the survey was the high level of teenagers planning to graduate from high school and attend four-year colleges. Fully 91% plan to graduate from high school and, of these, 60% plan to attend a four-year college. Another 28% say they'll go to a two-year college, and 15% to a vocational school.

Subjects that teenage respondents said they wanted information about include, in order of preference: Jobs and careers; clothes and style; rock music; local high school news; local sports; professional sports; science and space; movies, and cars and motorcycles.

Newspaper reading levels are highest among the 38% of teenagers who report their parents read to them almost every day when they were little. As among adults, the likelihood of newspaper readership by teenagers varies by family income and region. In the top socio-economic bracket, 64% of the

teenagers read a newspaper on a typical weekday; in the lowest bracket only 29% do. In that bracket, 50% did not read any paper in the course of a full week.

For teenagers as for adults, advertising is one of the most valuable functions of newspapers. When asked to rate the most helpful source of advertising, newspapers won handily, with a 41% vote, compared to 18% for television, 17% for magazines and 2% for radio.

*A 1988-89 survey by Simmons Market Research Bureau, financed by the Canadian newsprint companies making up the Newsprint Information Committee and supervised by the Newspaper Advertising Bureau.

"Study of Newspaper Advertising Performance"

One of the continuing tasks in selling newspapers is to persuade advertisers who are television-oriented that the process of communicating in newspapers really is different from the process of getting messages from television.

In this study, 20 newspapers conducted 23 studies of 10 to 15 ads in specific issues of their newspapers.

The project provides hard data on the likelihood that a reader will open the specific page on which an ad appears and on the likelihood that the reader will take an interest in that particular ad.

NAB has found that the average reader sees about 80 percent of a newspaper and that his interest in any one ad is about four times higher if he is a prospective buyer than if he is unlikely to buy the product.

In addition to the readership interviews, the project has included a number of experiments. By measuring the brain activity of readers and tracking their eye movements across the page, the experiments found that the typical person does not so much read a newspaper as scour it for information. The reader's eyes dart, with surprising speed, across the newspaper's pages before pausing to read an item that proves of interest.

This indicates that newspaper reading is a much more dynamic process than previously realized. For advertisers, the findings mean that prospects for their goods and services are the very people most likely to spot their advertisements and then stop to read them.

Earlier Studies

Other projects, dating back to 1961, that were supervised by the Newspaper Advertising Bureau and financed by the Canadian newsprint companies that comprise the Newsprint Information Committee, include:

Classified Advertising: Its Audience and Its Consequences.
How the Public Gets Its News.
Shoppers on the Move.
Psychographics of the Newspaper Audience.
What Can One Newspaper Ad Do?
When People Want to Know . . . Where Do They Go fo Find Out?
The Retail Customer: How, When and Where She Shops and Spends.
Repetition in Newspapers.
The Daily Newspaper and Its Reading Public.

Harmonized Tariff Schedule of the United States For Standard Newsprint Paper and Roto Newsprint Paper

On January 1, 1989 the Harmonized Tariff Schedule of the United States annotated for Statistical Reporting Purposes (HTS) became effective. It was published pursuant to section 1207 of the Omnibus Trade and Competitiveness Act of 1988 (ACT) (P.L. 100-418; 19 U.S.C. 3007). The Harmonized Tariff Schedule translates the old Tariff Schedule of the United States into an internationally uniform structure.

While the standard newsprint specifications are essentially unchanged, the smoothness criteria represent a compromise, as the United States had wanted higher standards of smoothness than did European nations. For purposes of administering the Harmonized Tariff Schedule, roto newsprint was placed in a separate category from standard newsprint to reflect the difference in smoothness standards of the two grades.

U.S. Tariff officials point out, however, that these administrative classifications do not dictate the end use of the product. For example, a product meeting the definition of standard newsprint may be used in roto newsprint applications.

Standard newsprint (heading 4801) is still duty-free across the board; roto newsprint (heading 4802) is duty-free to GATT countries but a tariff is called for on U.S. imports from certain communist nations. Given the changes evolving among communist-bloc countries in eastern Europe, there may be some changes forthcoming in that list.

Chapter 48 of HTS covers Paper and Paperboard; Articles of Paper Pulp, of Paper or of Paperboard. Note 3 of 48-1 defines newsprint as follows:

The expression "newsprint" means uncoated paper of a kind used for the printing of newspapers, of which not less than 65 percent by weight of the total fiber content consists of wood fibers obtained by a mechanical process, unsized or very lightly sized, having a smoothness on each side not exceeding 200 seconds Bekk, weighing not less than 40 g per square meter and not more than 57 g per square meter and having an ash content by weight not exceeding 8 percent.

Note 4 includes the roto newsprint category as follows:

In addition to hand-made paper and paperboard, heading 4802 covers only paper and paperboard made mainly from bleached pulp or from pulp obtained by a mechanical process and satisfying any of the following criteria:

For paper or paperboard weighing not more than 150 g/m^2:

(a) Containing 10 percent or more of fibers obtained by a mechanical process, and
   1. weighing not more than 80 g/m^2, or
   2. colored throughout the mass; or

(b) Containing more than 8 percent ash, and
   1. weighing not more than 80 g/m^2, or
   2. colored throughout the mass; or

(c) Containing more than 3 percent ash and having a brightness of 60 percent or more*; or

(d) Containing more than 3 percent but not more than 8 percent ash, having a brightness under 60 percent* and a burst index equal to or less than 2.5 kPa/g/m^2; or

(e) Containing 3 percent ash or less, having a brightness of 60 percent or more* and a burst index equal to or less than 2.5 kPa/g/m^2.

*Brightness is to be measured by the Elrepho, GE or any equivalent internationally recognized brightness testing method.

On page 48-4, there is a Statistical Note that reads as follows:

The terms "standard newsprint paper" and "roto newsprint paper" cover printing papers of headings 4801 and 4802 which conform to the following specifications:

Weight:	Not less than 46.3 g/m^2 nor more than 57 g/m^2.
Size:	Rolls not less than 33 cm wide and not less than 71 cm in diameter; sheets not less than 51 cm by 76 cm.
Thickness:	Not more than 0.11 mm.
Sizing:	Time of transudation of water shall be not more than 10 seconds by the ground glass method.
Ash Content:	Not more than 6.5 percent.
Color and Finish:	White; or tinted shades of pink, peach or green in rolls; not more than 50 percent gloss when tested with the Ingersoll glarimeter.

On page 48-5 appears the Harmonized Tariff Schedule of the U.S. (1990) for newsprint and roto newsprint paper as follows:

Heading Subheading	Statistical Suffix & Code	Article Description	Units of Quantity	Rates of Duty General	2*
4801.00.00		Newsprint in rolls or sheets		Free	Free
	20 9	Standard newsprint paper	t		
	40 5	Other	t		
4802.60.90		Other		Free	11.5%
	20 6	Roto newsprint paper	kg		
	40 2	Other	kg		

* Category 2 consists of communist countries. In the 1990 HTS the countries included Afghanistan, Bulgaria, Cuba, Czechoslovakia, East Germany, Estonia, Latvia, Lithuania, Kampuchea, Laos, Mongolia, North Korea, Romania, U.S.S.R., and Vietnam.

QUALITY TESTS FOR NEWSPRINT

Following are descriptions of commonly used optical and surface tests for newsprint.

Brightness

A measure of the amount of light reflected by a sheet of paper, given as a percent. This test is done with a photometer and the light used is a specific blue light, having a spectral distribution peaking at 457 nm (nanometers).

A typical sheet of newsprint would fall in the 58 to 60 percent brightness range.

Reference: CPPA Method E1
Tappi Method T452
T525

L*a*b* (Starlab) Color Description

A system used to describe and to measure color. To do so, it uses three values: L* stands for lightness and is given as a percent varying from 100% for a perfect white to 0% for a perfect black; a* indicates redness (a positive value) and greenness (a negative value); b* indicates yellowness (a positive value) and blueness (a negative value); both a* and b* are unitless.

A (typical) average sheet of newsprint has the following description:

L* = 82.0
a* = 1.3
b* = 4.0

Reference: CPPA Method E5P
Tappi Method T524

Printing Opacity

The property of paper that characterizes the "show through" of printing from the adjacent printed sheet.

It is determined from the amount of light reflected from a single sheet with a black backing expressed as a percentage of the amount of light reflected from the same sheet backed by an effectively opaque pile of the same paper.

Opacity is a measure of the hiding power (light scattering and absorbing) of the sheet: a low printing opacity results in the printed image of the reverse side being readily seen.

Reference: CPPA Method E2
Tappi Method T519

Parker Print-Surf Roughness

The PPS tester was designed to measure airleak surface roughness under conditions similar to those encountered during printing operations. Backings and clamping pressures can be varied during the test to simulate conditions during gravure, offset or letterpress printing. The test is carried out by measuring the resistance to the flow of air in the gap between the paper surface and the measuring head pressed against the surface to be tested. A higher value in µm (micrometers) for the flow indicates a rougher surface than does a lower value.

Other air leak Roughness methods include Sheffield, Bendtsen, Gurley and Bekk, all using specific instruments giving different values. In the case of Gurley and Bekk, increasing numbers indicate smoother sheets.

CALCULATING WEIGHT LOSS IN DAMAGED ROLLS

Slab Off Losses

The following data represents percent roll weight loss for the indicated amounts of slab off.

Roll Dia. (inches)	40	45	50
Slab Off (inches)	Percent of Weight Loss		
.25	2.51	2.23	2.00
.50	4.99	4.43	3.99
1.00	9.85	8.76	7.89
2.00	19.19	17.12	15.46
5.00	44.19	39.82	36.23

These are calculated from the following equation:

$$\text{Percent slab off} = \frac{400\,(S \times D - S^2)}{D^2 - C^2}$$

where S = Slab off (inches)
D = Roll diameter (inches)
C = Core diameter (inches)

UNCOATED MECHANICAL PAPERS

Sometimes referred to as uncoated groundwood papers, this category is similar to newsprint in that it consists of paper made with 10 percent or more mechanical pulp. While similar to newsprint, the uncoated mechanical papers are brighter, smoother and heavier.

Because of growth in the use of inserts, catalogs and directories, demand for uncoated mechanical papers has been increasing sharply in recent years. Some producers have converted older, slower newsprint machines to these grades.

Included in the category are:

- Directory and catalog stock (heavier and brighter than newsprint; grammage below 40 pounds).
- Magazine stock (above 65 brightness on Elrepho scale).
- Super calendered stock.
- Bulky news (same weight as newsprint but thickness above .0042 inch; used for paperback books).
- Heavyweight newsprint (basis weight 35 pounds per ream).
- Canary newsprint.
- Newsprint of any color other than white, yellow, peach or green.
- Base stock for paper towels and wallpaper.

UNCOATED MECHANICAL PRINTING PAPER CAPACITY BY REGION
(Forecast to 1993; as of June 1990)

(000's Tonnes)

	1989	1990	1991	1992	1993	CHANGE (1989-1993) 000's Tonnes	%
Canada	1,810	2,030	2,270	2,320	2,390	580	32.0
United States	1,675	1,640	1,705	1,730	1,730	55	3.3
Scandinavia	2,395	2,610	2,770	2,825	2,890	495	20.7
European Community	2,340	2,350	2,390	2,470	2,565	225	9.6
Other W. Europe	530	560	585	585	585	55	10.4
Latin America	160	160	195	225	230	70	43.8
Japan	2,335	2,420	2,420	2,420	2,420	85	3.6
Other Asia	835	835	835	835	835	0	0.0
Eastern Europe	800	820	820	820	820	20	2.5
Others	160	190	200	220	235	75	46.9
World	13,040	13,615	14,190	14,450	14,700	1,660	12.7
Change from Previous Year		+575	+575	+260	+250		

Source: Canadian Pulp & Paper Association

CAPACITY CHANGES SCHEDULED FOR UNCOATED MECHANICAL PAPER
(Chronological to 1993; as of June 1990)

START-UP DATE	COMPANY - LOCATION	ANNUAL NET CHANGE ('000's Tonnes)
January 1989	Stone-Consolidated Inc. - Trois-Rivieres, Que.	30
April 1989	Jujo Paper - Yatsushiro, Japan	55(net)
May 1989	St. Raymond Paper Ltd. - St. Raymond, Quebec	(30)
October 1989	Great Northern Nekoosa - Millinocket, Maine	(40)
October 1989	Tampella - Anjala, Finland	(50)
1989	Abitibi-Price, Alma, Quebec	45
1989	Albruck - Albruck, West Germany	30
Early 1990	Mondi - Merebank, South Africa	40
October 1990	Kruger Inc. - Trois-Rivieres, Quebec	70
October 1990	Rauma Repola, Rauma, Finland	80(net)
3rd Q. 1990	Stone-Consolidated Inc. - Grand-mere, Quebec	190
1990	Laakirchen - Laakirchen, Austria	55
July 1991	INPACEL - Arapoti, Parana State, Brazil	N/A
1992	Mutare Board and Paper Mills, Mutare, Zimbabwe	30
Late 1993	Boise Cascade Canada Ltd. - Fort Frances, Ont.	45

Source: Canadian Pulp & Paper Association

PAGES IN A ROLL

Newsprint is now being delivered in both English units and metric units. Using the English system, the number of newspaper pages on one side of the sheet in a newsprint roll may be estimated with the formula below:

$$\text{Number of pages} = 432{,}000 \times \frac{A}{(B)\ (C)\ (D)}$$

Where A = Weight of roll in pounds
B = Width of page in inches
C = Length (cutoff) of page in inches
D = Basis weight in pounds (weight of 500 sheets 24 x 36 inches)

* Please refer to footnote.

If newsprint specifications are in metric units and the page width and length are measured in inches, the following formula is useful:

$$\text{Number of pages} = 1{,}550{,}000 \times \frac{A'}{(B)\ (C)\ (D')}$$

Where A′ = Weight of roll in kilograms
B = Width of page in inches
C = Length (cutoff) of page in inches
D′ = Grammage (weight in grams of one sheet measuring one square meter)

*Please refer to footnote.

When all measurements are in metric terms, the following formula applies:

$$\text{Number of pages} = 10{,}000{,}000 \times \frac{A'}{(B')\ (C')\ (D')}$$

Where A′ = Weight of roll in kilograms
B′ = Width of page in centimeters
C′ = Length (cutoff) of page in centimeters
D′ = Grammage (weight in grams of one sheet measuring one square meter)

* Please refer to footnote.

*Multiply the result by 2 to determine the number of printed pages (both sides of the sheet) in a newsprint roll.

Source: ANPA

SUMMARY OF CONVERSION FACTORS

Inches to centimeters	multiply by	2.54
Pounds to kilograms	divide by	2.2046
Short tons to metric tons	divide by	1.1023
Basis weight to grammage	multiply by	1.627
Centimeters to inches	divide by	2.54
Kilograms to pounds	multiply by	2.2046
Metric tons to short tons	multiply by	1.1023
Grammage to basis weight	divide by	1.627

TYPICAL NEWSPRINT ROLL DIAMETERS, METRIC

Inches	Centimeters	Inches	Centimeters
45	114.3	39	99.1
42	106.7	38	96.5
40	101.6	36	91.4

TYPICAL NEWSPRINT ROLL WIDTHS, METRIC

Inches	Centimeters	Inches	Centimeters
60	152.4	34	86.4
59	149.9	32	81.3
58	147.3	31	78.7
56	142.2	30	76.2
55	139.7	29	73.7
		28	71.1

TYPICAL BASIS WEIGHTS, GRAMMAGE

Basis Weight Lbs./Ream	Grammage g/m^2	Basis Weight Lbs./Ream	Grammage g/m^2
24	39.05	30	48.82
25	40.68	31	50.45
26	42.31	32	52.08
27	43.94	33	53.70
28	45.57	34	55.33
29	47.19	35	56.96

ASSOCIATION MEETINGS

America*East Newspaper Operations Conference, Hershey Lodge and Convention Center, Hershey, PA. 1991—March 27-29; 1992—March 25-27.

American Newspaper Publishers Association, May 6-8, 1991, Vancouver Trade and Convention Center, Vancouver, B.C.

1992—New York City, May 4-6
1993—Boston, April 26-28
1994—San Francisco, April 25-27
1995—New Orleans, April 24-26

ANPA/TEC '91®, June 8-12, 1991, Las Vegas Convention Center.

1992—Atlanta, June 6-10
1993—New Orleans, June 12-16
1994—Las Vegas, June 4-8
1995—Las Vegas, June 10-14

California Newspaper Publishers Association, Feb. 14-17, 1991, Hyatt Regency, Monterey, CA.

Canadian Daily Newspaper Publishers Association, Sept. 26, 1990, Westin Hotel, Calgary, Alberta; April 17, 1991, L'Hotel, Toronto; Sept. 25, 1991, Chateau Champlain, Montreal.

Inland Press Association, Oct. 21-23, 1990, Drake Hotel, Chicago; Feb. 24-27, 1991, The Registry Resort, Scottsdale, AZ; Oct. 20-22, 1991, Drake Hotel, Chicago.

International Circulation Managers Association, June 30-July 3, 1991, Boston Marriott, Copley Place, Boston, MA.

International Newspaper Advertising and Marketing Executives, Jan. 20-23, 1991, Sheraton, Washington, D.C.; July 21-24, 1991, Hyatt Regency, Monterey, CA.

International Newspaper Financial Executives, Oct. 14-17, 1990, Fairmont, New Orleans, LA; May 19-22, 1991, Del Coronado Hotel, San Diego, CA; Oct. 20-23, 1991, J.W. Marriott, Washington, D.C.

Association Meetings continued

International Newspaper Marketing Association, May 19-22, 1991, Hilton Walt Disney World, Orlando, FL.

National Newspaper Association, Sept. 19-22, 1990, Hyatt Regency Crown Center, Kansas City, MO; Sept. 25-28, 1991, Excelsior Hotel, Little Rock, AR.

New England Newspaper Association, Oct. 10-12, 1990, Marriott Hotel, Portland, Maine; March 20-22, 1991, Marriott Long Wharf, Boston; Oct. 9-11, 1991, Marriott Hotel, Newport, R.I.

Newspaper Purchasing Management Association, Inc., May 6-8, 1991, Sheraton Harbor Island Hotel, San Diego, CA.

Southern Newspaper Publishers Association, Nov. 17-20, 1991, Boca Raton Hotel and Club, Boca Raton, FL; Oct. 11-14, 1992, The Greenbrier, White Sulphur Springs, WV; Oct. 9-13, 1993, Boca Raton Hotel and Club, Boca Raton, Fl.; Oct. 9-12, 1994, The Greenbrier, White Sulphur Springs, WV; Sept. 24-27, 1995, The Broadmoor, Colorado Springs, CO.

Suburban Newspapers of America, June 5-7, 1991, Westin Copley Place, Boston, MA.

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